

Summary

Weicon VA 100 Universal Industrial Super Glue is a high-quality grade of strong, versatile cyanoacrylate adhesive that works on a variety of materials. It bonds well to metals, plastics, rubber as well as wood, glass, leather, cloth and ceramics.

Weicon VA 100 has a medium viscosity and is thick enough to accurately apply to small parts.



Applications

- Bonding and fixing rubber seals and gaskets
- Making rubber O rings
- Bonding of plastics, rubbers, corks or metal parts
- Securing and fixing components in electronics
- Model making, home repairs, and DIY
- Bonding to glass or ceramics
- Adhering leather or other high density cloth-like materials

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Technical Details

General Surface Compatibility

Metal	++
Plastic*	++
Rubber	++
EPDM Elastomers	+
Wood	+
Balsa-Wood	+
Glass / Ceramic	++
Leather	++

++ = Highly Compatible + = Compatible - = Not Compatible

*Performance will vary depending on the exact type of plastic being bonded. Generally, low surface energy plastics will be much harder to bond to than high surface energy (such as rigid PVC).

Important

The values listed here and the information presented should not be treated as a substitute for specific technical advice. We cannot warrant the products performance or suitability for particular applications.

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Properties

Ester Type	Ethyl	
Condition / Nature	Colourless, Clear Liquid	
Viscosity at 20°C Brookfield	60-120 MPa	
Maximum Gap Covering Power**	0.15mm	
Specific Gravity at 20°C	1.06 g/cm ³	
Flash Point According To Abel-Pensky DIN 55213	87°C	
Initial Adhesion on Aluminium*	30-60 Seconds	
Initial Adhesion on Nora Test Rubber*	3-20 Seconds	
Initial Adhesion on Rigid PVC*	10-60 Seconds	
Final Strength After	24 Hours	
Shear Strength Acc. To DIN 53283	Sand-Blasted Steel	20 N/mm ²
	Sand-Blasted Aluminium	15 N/mm ²
	Rigid PVC	13 N/mm ²
	ABS	12 N/mm ²
	PC	13 N/mm ²
	NBR	>8 N/mm ² (bonding exceeds strength of substrate)
Temperature Resistance	-50°C to +80°C	
Short-Term Temperature Resistance	+100°C	
Squatting Temperature	+150°C	
Refractive Index	1.49 n ^{D20} (Similar to Glass)	
Linear Thermal Expansion Coefficient ISO 11359 / ASTM D 696 (K ⁻¹)	80 x 10 ⁻⁶	
Specific Forward Resistance DIN 53482* / ASTM D 257	>10 ¹⁵ Ω mm	
Dielectric Strength DIN 53481* / ASTM D 149	25 kV/mm	
Thermal Conductivity ISO 8894-2 / ASTM C 177	0.1 W/m·K	

Solubility

Dimethyl Formamide, Dimethyl Sulfoxide, Acetonitrile, Alkali.

Swelling is possible after long-term storage in ethyl acetate, acetone and methylene chloride.

*Achieved in normal climate (DIN 50014) +23°C and 50% relative humidity. Within the given time period, handling strength can be reached.

**These details are dependent on the type of material to be bonded and its properties.

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Preparation of the Surface

To achieve the best possible results, the surfaces being bonded must be clean and dry. Smooth surfaces should be roughened whenever possible (e.g. by sanding) as this increases the available surface area for the adhesive to bond with.

Application

Apply Weicon VA 100 Universal Industrial Super Glue to one of the surfaces being joined. The bond line (or gap between the parts being bonded) should be between 0.05mm and 0.1mm otherwise, complete curing may not be achieved.

If bonding larger surface areas, Weicon Super Glues should be applied drop by drop to minimise the risk of inner tension of the adhesive. All of these glues are very economical as a single drop is sufficient for covering about 3-5cm² of surface area.

VA 100 should be used in an environment with 40-80% relative humidity if at all possible. In conditions below 40%, the cure will be substantially slowed or even inhibited. With a relative humidity greater than 80%, of when bonding basic substrates such as glass, shock-curing can occur. In such situations, some materials exhibit a drop in bond strength of approximately 10-15% due to inner tensions created in the bonding line.

Basic reacting surfaces (with pH values >7) will cure faster while acidic reacting surfaces will slow, and under certain conditions, completely inhibit polymerisation.

Physiological properties / health and safety

Physiologically, all Weicon Cyanoacrylate Adhesives may be considered essentially harmless. However, it is prudent to ensure that there is sufficient ventilation of work areas to cope with vapours released by the adhesive. Vapours released from contact adhesives may cause irritation to mucus membranes and the eyes. Avoid contact with skin and eyes (wear gloves and protective goggles). The use of Weicon Hand Protective Foam will also assist with preventing skin irritation and hand cleaning problems. For more information, please refer to the appropriate SDS.

Storage

Weicon VA 100 Universal Industrial Super Glue should always be stored in a cool, dry and dark area. The shelf life is at least 9 months if stored at room temperature. If stored at 5°C (in a refrigerator) the shelf life can be extended to over 12 months.

Availability

Weicon VA 100 Universal Industrial Super Glue is available from Swift Supplies in 3gm, 12gm, 30gm and 60gm Pens.

These pens are a unique feature of our Weicon Adhesive range that allows for natural, accurate and easy application of the adhesive.

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